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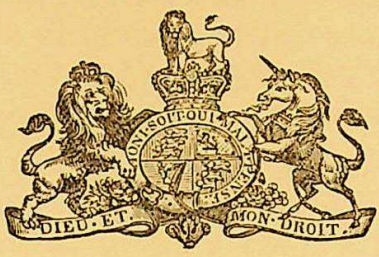

A.D. 1872, 22*nd* AUGUST. N° 2493.

Electrical Apparatus for the Cure of Nervous Affections.

LETTERS PATENT to George Haseltine, of the "International Patent Office," Southampton Buildings, London, Doctor of Laws, for the Invention of "IMPROVEMENTS IN ELECTRICAL APPARATUS TO BE WORN UPON THE HEAD FOR THE ALLEVIATION AND CURE OF NERVOUS AFFECTIONS."—A communication from abroad by Judah Moses, of Hartford, Connecticut, United States of America, Optician.

Sealed the 10th October 1872, and dated the 22nd August 1872.

COMPLETE SPECIFICATION filed by the said George Haseltine at the Office of the Commissioners of Patents, with his Petition and Declaration, on the 22nd August 1872, pursuant to the 9th Section of the Patent Law Amendment Act, 1852.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, GEORGE HASELTINE, of the "International Patent Office," Southampton Buildings, London, Doctor of Laws, send greeting.

WHEREAS I am in possession of an Invention for "IMPROVEMENTS IN ELECTRICAL APPARATUS TO BE WORN UPON THE HEAD FOR THE ALLEVIATION AND CURE OF NERVOUS AFFECTIONS," and have petitioned Her Majesty to grant

unto me, my executors, administrators, and assigns, Her Royal Letters Patent for the same, and have made solemn Declaration that it has been communicated to me from abroad by Judah Moses, of Hartford, Connecticut, United States of America, Optician.

NOW KNOW YE, that I, the said George Haseltine, do hereby declare that the following Complete Specification, under my hand and seal, fully describes and ascertains the nature of the said Invention, and in what manner the same is to be performed, in and by the following statement, reference being had to the accompanying Drawing, forming a part of this Specification :—

The object of this Invention is the production of a simple and efficient apparatus to be applied to and worn upon a person's head and which may be so applied without inconvenience to the wearer, and will generate and conduct galvanic or voltaic electricity directly to those portions of the head that are attacked by nervous affections such as neuralgia, headache, earache, toothache, catarrh, and the like.

The said Invention consists in the combination with a suitable conductor of electricity, constructed and adapted to be secured to and worn upon or around a person's head, of a battery or batteries for generating electricity, whereby the therapeutic effects of electro-galvanism upon the nerves of the head may be obtained in a simple, convenient, and effective manner.

Description of the Drawing.

Figure 1 is a plan of a metal bow or spring having at or near each end a voltaic pile for generating electricity.

Figure 2 shows how this Invention may be put into practice through the medium of a pair of spectacles.

Figure 3 shows how the said Invention is put into practice through the medium of a pair of eye glasses.

Figure 4 is an enlarged section on the line x, x, Figure 1, and

Figure 5 is an enlarged face view of the voltaic pile.

A designates a metal spring or band made of any material which is a good conductor of electricity. To this band at or near each end is connected a battery capable of generating electricity. In the example

shown voltaic piles are employed which consist of alternate plates of zinc *a*, and platina *b*, separated by any suitable material, say pieces of cloth *c*, which have been previously saturated with lime or acidulated water and dried. The plates which rest against the skin should be of opposite polarity, say zinc on the one side to constitute the negative pole and platina on the opposite side to consitute the positive pole of the duplex battery, as will be understood by reference to Figure 4.

These voltaic piles are secured to the spring or band in the present instance by rivets *d*, insulated preferably by rubber tubes or a coating of some insulating material to prevent metallic contact with the plates constituting the voltaic piles.

In Figure 2 the said Invention is put into practice through the medium of a pair of spectacles where the voltaic piles are connected to the outer ends of the temples or bows A^1 of the spectacles. In this instance the ordinary length of temple would bring each voltaic pile to a position between the external part of the ear and the head a place where hair does not usually grow, and hence directly against the skin; or if the front B of the spectacles is thrown up on the crown of the head the piles would rest just in front of the ear against the skin.

In Figure 3 the said Invention is put into practice through the medium of a pair of eye glasses where the voltaic piles are secured to the nose piece C, so as to rest against opposite sides of the nose. And this location of the voltaic piles may be adopted in the case of a pair of spectacles. It is obvious that the moisture of the skin or perspiration coming in contact with the voltaic piles and especially when in sufficient quantity to wet the cloth between the plates *a*, *b*, is sufficient to create a decided electrical current which must necessarily pass through the part of the head between the poles of the voltaic piles or batteries.

If it should be desired to increase the effect of the voltaic piles they may be immersed in brine or acidulated water or acid before the band, spectacles, or eye glasses are applied to the head; or a receptacle containing brine or acidulated water may be attached to the apparatus to allow the same to reach the voltaic piles, and thus keep a constant current passing from the one pile through the metal conductor to the other pile and thence through the head to the starting point.

Haseltine's Electrical Apparatus for the Cure of Nervous Affections.

This Invention is not limited to the combination with a metal band adapted to be worn upon the head of any particular kind of battery, the voltaic pile has been illustrated because it is the simplest and most easily applied. Neither is the said Invention limited to any particular form or shape of metal band so long as the same is a suitable conductor of electricity and is so constructed as to be worn upon the head or any part thereof.

The beneficial action of electro-magnetism upon the nervous system is so well known at the present day that it is unnecessary to enter into a discussion on the subject; suffice it to say that by causing a current of electricity to pass through the head to operate upon the nerves thereof excellent prophylatic and therapeutic results are obtained.

Having thus fully described the said Invention as communicated to me by my foreign correspondent, and the manner in which the same is to be performed, I wish it understood that I claim, the combination of a voltaic pile or piles, or of an electro-galvanic battery or batteries with a metallic spring band, clasp, or conductor, designed to be worn upon some part of the human head, and so arranged that an electrical current may be passed through the head or some portion thereof, substantially as and for the purposes herein specified.

In witness whereof, I, the said George Haseltine, have hereunto set my hand and seal, this Twenty-second day of August, in the year of our Lord One thousand eight hundred and seventy-two.

GEORGE HASELTINE. (L.S.)

Witness,
CHAS. J. GOOCH.

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